



# Good News For Tree Lovers



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## TO THE EDITOR:

These stories of good news about trees have been assembled for your use, and glossy prints of the pictures on this page will be sent you promptly on request to this association. Trees are the nation's most valuable natural assets; shade and ornamental trees are community assets whose monetary value cannot be measured. Information on this sheet is based upon exhaustive research and authoritative opinion compiled by this association. Additional facts on America's great new American elm are available. Plans are under way to supply you this information periodically.

AUGUSTINE ASCENDING ELM RESEARCH ASSOCIATION  
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## Experts Tell Basic Points of Satisfactory Tree Selection

The best guide to selection of shade and ornamental trees is to determine, first, the purposes for which the trees are to be planted; second, the conditions to which they must adjust themselves; third, the varieties most suited to satisfactory growth under city restrictions; and, finally, individual preference.

The fact that individual preference is often given precedence over other factors in tree selection may account for unsatisfactory shade tree conditions in some communities.

"What is the best tree for city planting?" remains, in itself, unanswerable. As well ask what is the best suit for a man to wear, without asking the size of his body, the nature of his employment, the desires of his taste, and the capacities of his purse.

The American Arborists Association lists 26 popular varieties of shade trees as examples from which satisfactory selections may be made, with characteristic shape and height at maturity, as follows:

LARGE TREES		
Name	Shape	Height
American Elm	Vase	75-100'
Tulip Tree	Oval	60-80'
Jackberry	Sweeping	75-100'
American Sycamore	Oval	60-80'
Plane Tree	Oval	60-80'
Sugar Maple	Oval	60-80'
Honeylocust	Sweeping	75-100'
Pin Oak	Conical	60-90'
Red Oak	Oval	60-90'
White Oak	Sweeping	75-100'
Beech	Sweeping	75-100'
White Ash	Oval	75-90'
MEDIUM TREES		
Sweet Gum	Conical	40-60'
Linden	Oval	40-60'
Buckeye	Oval	40-50'
Horse Chestnut	Oval	40-50'
White Birch	Oval	40-50'
SMALL TREES		
Dogwood	Rounded	15-30'
Redbud	Sweeping	15-30'
Shadblow	Sweeping	15-30'
Amelanchier	Oval	15-30'
Ironwood	Conical	25-40'
Hawthorn	Sweeping	15-25'
Flowering Crabapple	Rounded	15-40'

While selection of trees is somewhat a matter of preference, tree experts have established some basic standards of purpose and conditions to which trees must conform to provide satisfaction for this generation and those to come.

These have been summarized by the Augustine Ascending Elm Research Association as follows:

**GENERAL:** Adaptability to climatic and soil conditions is important. Rate of growth and size and shape at maturity must be considered. Reasonable initial cost and economy of maintenance are important to budget limitations.

**PARKS:** A combination of varieties, shapes, and sizes is desirable for an over-all landscaping program. Trees with neat growing habits are desirable to permit proper maintenance and growth of lawns. Flowering trees and shrubs are important. Small spreading trees and shrubs should be planted with care so that misuse of park areas will not be encouraged. Specimen trees of unusual varieties add interest in limited numbers.

**STREETS:** Because of traffic conditions, most small trees are undesirable, constitute hazards and are being removed in large numbers where they were planted in horse and buggy days. Medium trees are often preferred and frequently desirable for a compact landscaping effect, but should not be low-branched varieties which tend to reduce traffic visibility. Tall-growing bushy or spreading trees interfere with overhead utilities. Such cases can only be corrected by removal of large limbs. Compact large varieties have many advantages. Lower limbs can be trimmed for traffic visibility without affecting appearance of tree. Trees selected for street planting should be characterized by sturdy crotches and strong branches, with maximum indestructibility. Trees that are subject to breaking branches are costly in upkeep. Compactly deep-rooted trees are desirable, for such trees do not have tendencies to high root growth above or spreading surface roots that may damage sidewalks and paving.

**CEMETERIES:** Selection should be much the same as for parks, except that trees having spiritually aesthetic form at maturity are desirable in generous numbers. It is especially important that trees interfere very little with lawn growth and general maintenance, which is the mark of a well-kept cemetery and memorial park.

**GOLF COURSES:** The trees chosen for golf course planting may well be the architectural mark of the course. Varieties should be selected for enhancement of grounds and buildings, enclosure hedges, and easy influence on growth and maintenance of lawns.

## Finds Trees May Be Adjusting to Natural Changes

Changing environment may well be a greater factor in temporary tree plagues than disease or insect pests, in the opinion of August P. Beilmann of the arboretum of the Missouri Botanical Garden.

Dr. Beilmann states that there is no static ecological balance ever achieved in nature but that this balance is dynamic, always changing. He applies this principle to American shade trees. He finds that the present tree plantations of the Middle West cover areas which were grasslands only 130 years ago, and that almost all of the trees planted on the highways, in parks, countryside, and yards of America are of the bottomland varieties — elms, sycamores, pin oaks, etc.

Consequently, he believes, these bottomland trees "have been growing on the drier sites for such a short time that they may hardly expect them to be fully adjusted." He concludes from this that "ravages of phloem necrosis may be due, in part, to the fact that they have been attempting to use a bottomland tree on what had very recently been grassland," and that "chestnut blight and oak wilt are merely an expression of incomplete adjustment to a changing environment."

The Augustine Ascending Elm Research Association, which has made exhaustive studies of influences affecting shade trees, noted recently that the elm tree may be traced through a geological history covering more than 60 million years, during which there was no geological era in which evidence of elm trees have not been found. Geologists have found, though, that in some geological eras there have been numerous varieties of elm, and in following eras there may have been only a half to a third as many, while the next era had again a greater number of varieties.

Based on such evidence as this, and on many other studies, the association believes that some of the so-called elm plagues of the present day are a result of nature's trying to achieve a new ecological balance, and that this new balance will be achieved when new strains of trees are evolved which grow well on both high and low water-table ground.

Supporting this conviction, the association has guaranteed all Augustine Ascending Elms against mortality from any virus or fungus, and has included specifically any Augustine elms planted to replace any other variety of elm trees which have died from any cause.



Augustine Ascending Elm is especially adaptable for planting in central areas of city because compact root system requires minimum pavement opening, insures against interference with underground utilities and manholes, and provides strong anchorage for tree. This picture was taken in Winnetka, Ill., where garden club selected Augustine Ascending Elms to beautify business street.

## Elm Tree Has Secure Place America's Most Loved Tree for Generations

One cannot observe a row of elms without being impressed with their beauty and a realization of how poor the world would be without them.

The elm is a graceful, hospitable tree, whose history can be traced geologically 60 million years back into the mists of antiquity. The elm's place in the life and affections of America has been secure since New England settlers built homes beneath the spreading branches of trees that reached skyward.

As communities in the Massachusetts Bay Colony developed, and the early settlers moved from Plymouth and Boston to found settlements along the coast and inland to the Berkshires, the pioneering homesteaders transplanted elm saplings from the forests to ornament their land and to shade their streets.

As these pioneering settlers moved westward to build a new nation, they shared their patient pilgrimage with the elm, and it is estimated that today more than a billion elms are rooted in American soil between the grey Atlantic and the blue Pacific. Communities in every state of the nation have loyal pride in their elms, and more than 25 million shade and avenue elms now adorn the landscape of the country. The elm tree is truly America's most beloved tree, a tree that shades and blesses a nation of homes.

To the familiar vase and fountain shaped varieties of American elm has now been added a new and inspiring generation — the Augustine Ascending Elm, whose aesthetic grandeur, majestic form, and remarkable health and vitality have won the admiration of a nation of tree lovers.

Discovered as a young tree in Normal, Ill., about 20 years ago, the new elm tree was carefully observed, root grafted scions planted under close scientific observation in widely separated areas, and finally released for general planting about five years ago. So outstanding were its attributes that in that short space of time, thousands upon thousands of Augustine Ascending Elms have been planted in over 200 cities in 36 states.

The Augustine Ascending Elm's remarkable health is backed by a firm guarantee against mortality from any virus or fungus such as Dutch elm disease or phloem necrosis, and the variety is widely used to replace other varieties which have died in some areas.

**NEW ELM TREE**  
The Augustine Ascending Elm, developed after 20 years of study, from an unusual tree discovered in Normal, Ill., is a true elm tree of American origin. It is a true elm tree of American origin. It is a true elm tree of American origin. It is a true elm tree of American origin.

**ARBOR DAY**  
Arbor Day was inspired by the late J. Sterling Morton and first observed in Nebraska in 1872. It is now observed annually in all 48 states, and has resulted in plantings of millions of trees with an aggregate monetary value of many billions of dollars.

**NATURE REBUILDS**  
There is a constant renewing of tree life by natural succession, says the Augustine Ascending Elm Research Association. Fire may destroy forests, insects and diseases invade them, or winds blow them down, but given time, they will build them again.

**WILL TO LIVE**  
Trees have a strong will to live. The Augustine Ascending Elm Research Association states that when a city tree dies, its death can almost always be traced to some external cause — with human carelessness as the principal one.



Two youthful Augustine Ascending Elms in Normal, Illinois, evidence full development of the variety's inspiring columnar form and compact shape. Dense foliage gives ample shade, but compact growth permits sun to reach thriving lawn. Neat root habits do not disturb surface of soil and permit easy lawn care.

## Trees Thrive in Central Areas of Many Cities

Planting of shade trees in central business districts of cities and towns has become increasingly popular since Rockefeller Center startled blasé New Yorkers by planting inspiring shade trees above a subway on busy Fifth Avenue.

More recently, Marshall Field and Company planted avenues of trees in the pavement of Chicago's State Street, also on top of a subway, and another noteworthy planting was made on Chicago's "Magnificent Mile," the stretch of Michigan Boulevard north of the Chicago River which is noted for smart hotels, shops, and restaurants. American elm varieties were chosen for both these Chicago plantings.

Beautification of central business areas has been undertaken also with good results in many smaller cities and towns. Lancaster, Penn., for example; Winnetka and Cicero, Ill.; and many others. In these cities, as well as in many others, Augustine Ascending Elms are now selected for central district plantings because of their upright characteristics and adaptability to city disciplining.

Minimum pavement opening is needed for Augustine Ascending Elm because of its compact root system. Neat root growing habits do not tend to interfere with underground utilities, mains, sidewalks, and surrounding pavement. At the same time, its compact branching system insures clearance for overhead utilities and surrounding establishments, and permits clear traffic visibility.

The Augustine Ascending Elm bears no seed and is a clean city tree. Its large leaves and dense foliage provide good shade. Its columnar form is inspiring, and blends with the architecture of nearby buildings.

Augustine Ascending Elm is a mutation of American elm which has proven health for any part of the country where elm trees have grown before. This new elm does not spread its branches as do most varieties of elm. Its strong, deep roots provide powerful anchorage and with its great indestructibility and upright character it has high resistance to the elements.

Recognizing concern existing in some areas of the country over fungus and virus diseases plaguing some older varieties of elm trees, the Augustine Ascending Elm Research Association, which controls the variety, has covered all Augustine elms with a guarantee against mortality from any virus or fungus. This is believed to be the first guarantee of health ever placed upon an American elm variety.

## TREES GROW IN CYCLES

Trees, like members of the animal kingdom, have generations. For instance, elm trees may be considered as having a 150-year generation; oaks, 250 years; beeches, 350 years. The poplars are shorter lived and have generations of only 30 to 40 years. New generations are nature's creations, both in the form of occasional mutations of new strains and in the form of a yearly crop of seedlings. Each year some trees reach the fullness of their time, and in a balanced and orderly fashion, nature prepares the way for new creativity.

## Arbor Day

(Editorial)

Of all the legal and public holidays nationally or locally observed in the United States, Arbor Day is exceptional in that it is set aside for an active observance dedicated to the future, rather than remembrance of the past.

Arbor Day was inspired by the late J. Sterling Morton and first observed in the State of Nebraska on April 10, 1872. More than a million trees were planted in Nebraska in that first Arbor Day observance. Arbor Day is now observed — on varying dates — in all 48 states of the nation, and has resulted in the planting of millions of trees with an aggregate value of billions of dollars. The aesthetic value of the trees, the increase in property values they have created, and the inspiration they have given to millions of Americans could not be measured in terms of dollars and cents.

Arbor Day observances are arranged by community groups, generally, with anywhere from one to 100 trees being planted at a single ceremony, or several times that number in related ceremonies. Frequently the plantings are dedicated, and appropriate programs are conducted by sponsoring groups.

In recent years, new varieties of shade trees have found much favor for Arbor Day plantings because they represent renewed vitality of tree life, regeneration, and inspiration for the future which is basic to Arbor Day. Among the new varieties in special favor for such plantings is the Augustine Ascending Elm, a mutation of American Elm with unusual characteristics of growth that make it an ideal tree for city plantings, and an inspiring form aesthetically suitable for occasions where spiritual dignity of form is especially appropriate.

## Many Cities Have Discovered Young Trees Most Practical

The Department of Recreation and Parks of Baltimore, Md., has found young trees most economical for new plantings in parkways, according to an article in The American City magazine.

This coincides with experience reports gathered annually by the Augustine Ascending Elm Research Association, covering plantings of new variety American elms in more than 200 municipalities in 36 states. In every instance, the association reports, young trees have thrived mightily and increased rapidly in value.

The American City magazine quotes Charles A. Young, Jr., Baltimore park forester, who found that trees of 1 to 1½-inch caliper make the most rapid acclimation, and are most economical in initial cost, labor, and care.

The Forestry Division of the Bureau of Parks of Baltimore has experienced gratifying results with the new Augustine Ascending Elm variety, a mutation of the American elm, discovered about 20 years ago in Normal, Ill., by the late Archie Augustine, noted horticulturist and former president of both the Illinois and national nurserymen's associations.

The tree was subjected to exhaustive testing, research, and development and then propagated for general planting under the supervision of an association representing Mr. Augustine's family and Illinois tree experts.

The new variety evidences many characteristics of special importance for city planning. It grows about 20 per cent faster than other varieties of elm, has strong trunks, crotches, and branch system, develops an upright form, and has a compact root system. It has unusual health characteristics and resistance to storm damage, and has dense foliage which provides good shade. Because of its compact columnar form, the shade of this variety does not interfere with lawn development.

The Augustine Ascending Elm is believed to be the only variety of elm tree firmly guaranteed against mortality from any virus or fungus, such as Dutch elm disease and phloem necrosis. The

## New Elm Is Born; Becomes Choice of Many Cities

## Guarantee New Elm Against Tree Plagues

The Augustine Ascending Elm, a new variety of American elm, propagated from a parent tree discovered about 20 years ago in Normal, Ill., is now planted in over 200 cities in 36 states. The variety is characterized by exceptional health, rapid rate of growth, and upriser columnar form. Each tree bears a registry number and tag of identification to verify experience reports.

Establishing the guarantee, the association stated a firm belief that the Augustine Ascending Elm has a very strong resistance to elm diseases, based upon scientific tests and experience data.

The variety has been used in large numbers by many cities to replace older strains of elm trees which have been afflicted with age or disease. The association's health guarantee specifically applies to Augustine Ascending Elms planted to replace other elms which have died from any cause, as well as those used for new plantings.

Because of its inspiring form and exceptionally neat growing habits, Augustine Ascending Elms have reached a new high in appreciation for cemetery plantings, and are now growing in some of the nation's most beautifully landscaped cemeteries and memorial parks, including Oak Ridge Cemetery, Springfield, Ill., near the tomb of Abraham Lincoln, and West Point Military Academy Cemetery in West Point, N.Y.

The upreaching form of Augustine Ascending Elm, its fast growth, and compact root and branch systems make it especially desirable for cemetery planting, where it lends inspiring dignity and grace to its surroundings.

Planted in memorial rows, Augustine Ascending Elm soon develops a breath-taking magnificence at cemetery entrances, and serves a combined purpose of beauty and utility when used in screening rows. In small groups, the tree blends with almost any landscape treatment, and in single plantings it accents the general landscape treatment with artistic splendor.

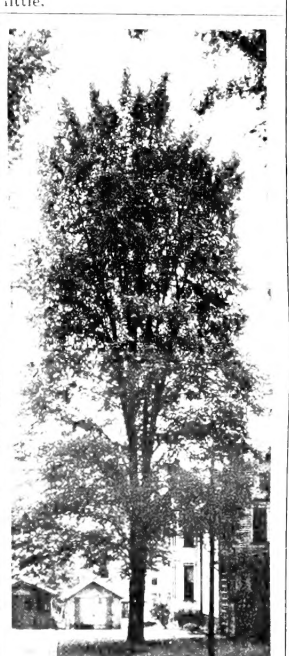
Of special importance to cemetery officials are the influences of Augustine Ascending Elm plantings on maintenance of the surrounding area. The tree bears no seed and is therefore unusually clean. Its compact root system raises the soil around the tree very little.

These trees were planted by the standard method used by the forestry division. This prescribes digging a hole twice the size of the root spread and replacing all soil with prepared soil of the following composition: top soil, 80 per cent; rotted cow manure, 10 per cent; peat moss, 10 per cent. The trees were staked with 8-foot oak or steel fence posts, and supported by wire covered with used inner tubing or garden hose.

**Trees Gain From City Disciplining**  
Pressures of city living are felt by shade trees when streets must be widened or extensive underground construction is undertaken, but otherwise there are many varieties of beautiful trees which thrive under city living conditions.

City trees gain much through disciplined living. Buildings which challenge them for room also shelter them from the full force of destructive storms and high winds. Municipal housekeeping protects them from many attacks by animals and insects and assures watchful consideration of their health.

Root systems of city trees cannot spread unrestricted near the surface, but must dig deep into the soil below pavements for nourishment and anchorage. In time of drought, these trees, conditioned to sub-standard moisture and dependent upon finding nourishment below the surface soil layer, fare better than those which are accustomed to adequate moisture supply and ample nourishment near the surface.



Magnificent tree in Normal, Illinois, discovered as a young tree 20 years ago by the late Archie Augustine, and the parent tree of all Augustine Ascending Elms now growing in over 200 cities in 36 states. Columnar form, compact root and branch system, and vigorous health of parent is evidenced in its scions.

Augustine Ascending Elm, a new upright variety of American elm propagated from a tree discovered 20 years ago in Normal, Ill., has proved an exceptionally desirable tree for city planting since it was first released to the public in the fall of 1949.

Thousands of Augustine Ascending Elms have been planted in over 200 cities in 36 states to replace older trees and to beautify parkways in new subdivisions, or to become distinguishing features of important shopping districts, parks, cemeteries, and golf courses.

Some cities, like Baltimore, Md., and Cudahy, Wis., have planted large numbers of young Augustine Ascending Elms in newly built sections, finding them economical and thrifty because of low initial cost, minimum maintenance expense, and rapid rate of growth.

Others, like New Haven, Conn., have planted this new variety of America's most-loved shade tree as replacements for older varieties on streets and avenues that have been elm-shaded since Colonial days.

Still others, like Cicero and Winnetka, Ill., and Lancaster, Penn., have planted these youthful trees in central business districts where no trees have been growing for years.

Some cities have chosen the graceful upright elm for future plantings, lining out young trees to grow on to larger size for transplanting. New York City and Washington, D.C., are among those who have done this.

Some cities have chosen Augustine Ascending Elms for special plantings in parks; to beautify civic buildings, schools, colleges, etc., and for similar purposes. Boston and Saugus, Mass.; Wilmette, Ill.; and Denton, Tex., are among the communities who have done so.

For any city planting purpose, Augustine Ascending Elm has been approved by leading arborists and park and forestry officials. It is now specified officially in some cities as one of a limited number of shade tree varieties acceptable for public plantings.

Characteristic of the new elm are upright form, neat root and branch growing habits, sturdy roots, strong crotches and branches, unusual health, and great indestructibility.

The Augustine Ascending Elm Research Association, which controls the variety, states a firm belief that the variety has a very strong resistance to elm diseases, based upon scientific tests and experience data. Supporting this belief, it has firmly guaranteed all Augustine Ascending Elms without reservation against mortality from any virus or fungus.

## Spent 20 Years to Develop New Elm

Development of the Augustine Ascending Elm on scale to permit national distribution began nearly 20 years ago with experiments by the late Archie M. Augustine, of Normal, Ill. The noted horticulturist and former president of both the Illinois and national nurserymen's association had observed the outstanding characteristics of a young elm tree growing in Normal and began experiments to establish sound propagation procedure to continue the characteristics in scions of the parent tree.

Mr. Augustine's work resulted in propagation of several scions in a few years, all of which exhibited the same fast-growing, sturdy, neat, compact growing qualities of the parent tree, together with the parent's magnificently upreaching form.

Having determined desirable propagation procedure, Mr. Augustine had a pilot group of young scions well established when he died in 1947. He had also stimulated the interest of a number of tree experts in the new elm. Upon his death, these experts, and members of Mr. Augustine's family, formed a research association to continue the work he had started.

This association engaged in further propagation studies and in extensive research on present and historic aspects of the elm tree. It also released a number of young scions of the new variety for planting in arboreta and other test areas, and these were closely observed as they developed. In each case, the trees grew 20 to 25 times faster than other elm varieties, and each had the outstanding characteristics of the parent tree discovered by Mr. Augustine.

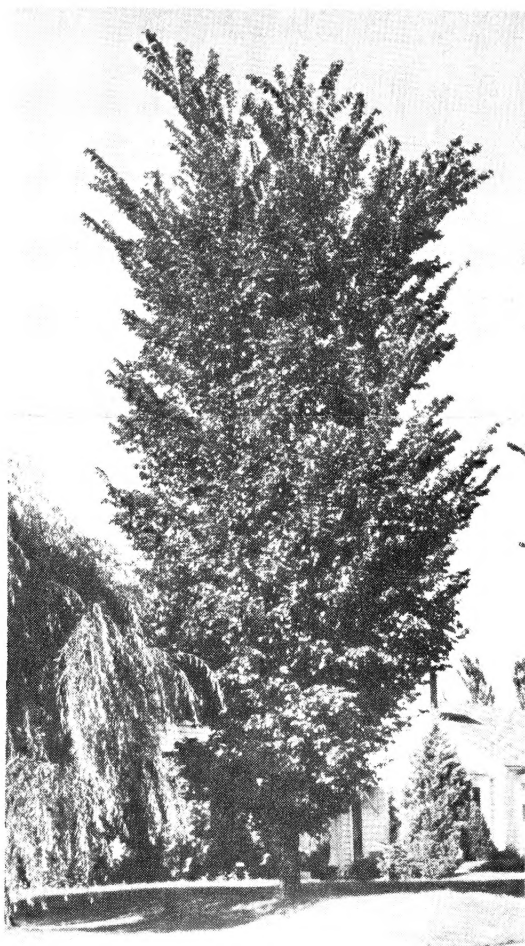
In January, 1948, the new tree was introduced at a Chicago convention of the American Landscape Nurserymen's Association. The new variety was released for general plantings in 1949. The entire available supply of Augustine Ascending Elm has been distributed each season since then, and a periodic check has been kept on all the trees now growing in over 200 municipalities in 36 states.

To meet the steadily increasing demand for this healthy new variety of American elm, the Augustine Ascending Elm Research Association has arranged an expansion of production under its supervision and control, and it is anticipated that propagation will be extended to several additional key areas of the country.



# HORTICULTURE

*America's Oldest Garden Magazine*



## A New Elm

**T**HE Dutch elm disease has been known in the Eastern states since about 1925, while phloem necrosis has attacked the elms of the Midwest since 1938. Several government and professional publications have influenced tree buyers since those times to avoid the planting of elm trees.

In 1946, the Augustine Ascending Elm Research Association was formed in Chicago to propagate and distribute a new type of elm — the Augustine Ascending Elm. With professional opinion about elm trees as it was, the venture to many seemed to be a very foolhardy one. However, Americans' partiality for the elm tree has since then vindicated the Association members' judgment, for today this new elm is found in more than 170 communities in the United States, and some cities, such as Baltimore, have as many as 800 specimens. More than 10,000 Augustine Ascending Elms have been shipped since the Association's inception just seven years ago. What accounts for this remarkable development during years in which thousands of elms were dying?

During the year 1937, Archie Augustine, one of the founders and president of the Illinois State Nurserymen's Association, also a former president of the American Association of Nurserymen, discovered a 17-year-old fastigate elm tree in Normal, Illinois. Mr. Augustine had long believed that elms, being such ready cross-breeders, one day would be propagated in large numbers only by grafting in order to secure uniform trees for controlled planting. He was immediately struck by the majestic appearance of this tree, and realized after close inspection that it was the elm he had been looking for. He cut some scion wood, and in his research nursery began to propagate it by grafts on American elm roots. The propagation has been taken over by the Association.

The identification of the tree was accomplished by a chromosome count performed by Dr. J. M. Beal, Chairman of the Department of Botany at the University of Chicago. His cytological studies supported botanical descriptions furnished by the U. S. Forestry Service and established the new elm as a tetraploid mutation of American elm. It differs most strikingly from the typical American elm in its fastigate form. The lateral branches of the

young tree are approximately of the same development and size from tip to base. The older tree develops roughly parallel, wall-like sides to form a stately, upright column of foliage, in marked contrast to the vase, or fountain shape, of the American elm. The Augustine Ascending Elm shows a more vigorous growth, stouter twigs and larger, more deeply-toothed leaves than the American elm. It bears no seed, has neat and compact root habits, a strong anchorage and sturdy trunk.

Dr. J. C. Carter, Chief Pathologist of the Illinois Natural History Survey, has succeeded in getting grafts from trees diseased with phloem necrosis to "take" on young potted Augustine Ascending Elms, and the trees to continue alive. Dr. Roger Swingle, Senior Pathologist of the U. S. Bureau of Plant Industry, reported to the association that "the Augustine Ascending Elm is susceptible to Dutch elm disease." But experiments similar to those of Dr. Swingle's are being performed using grafts from stricken elm.

For further information about this new elm tree, members should write to the Augustine Ascending Elm Research Association, 932 East 50th St., Chicago 15, Ill.

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